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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,893	04/25/2001	Yoshifumi Takeyama	35.C13231 D2	5173

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EXAMINER

ELVE, MARIA ALEXANDRA

ART UNIT

PAPER NUMBER

1725

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/840,893

Applicant(s)

TAKEYAMA ET AL.

Examiner

M. Alexandra Elve

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17, 19-27 and 29-31 is/are rejected.
- 7) ☒ Claim(s) 18 and 28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/219,597.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

Claim 18 is objected to because of the following informalities: "in mean square".

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim states, "closely contacted with the material", while the independent claim states that the medium is on the material to be treated.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 17, 19-24, 26-27 & 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Bampton (US Pat. 4,603,089).

Bampton discloses a process for bonding multi-layer sheet structures using laser welding. In one embodiment a shield material is applied between two sheets to prevent the laser energy from penetrating. Additionally, shields may be used to control the width of the laser weld. The invention may be applied to metallic and nonmetallic structures. A

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wide range of shield materials may be utilized, including plastics, thin films or chemicals. If the shield materials are reflective, the excess energy that penetrates the shield material can be reflected back into the covering sheet to solidify the weld. However, it is preferred that the shield material be an energy absorbing compound, tailored to the wavelength of the incident laser beam. The shield material may be used to control the width of the laser weld. Shields placed on the top may be removed after welding is completed. Laser wavelengths are approximately 10,600 nm. Bampton discloses metallic and nonmetallic materials, but not specifically magnetic tape. Magnetic tape is a nonmetallic material. Furthermore, the type of materials chosen are a choice in design and substitutions of known equivalent structures may be made. In re Kuhle 188 USPQ (CCPA 1975), In re Ruff 118 USPQ 343 (CCPA 1958). Consequently, Bampton anticipates instant claims.

Claims 17, 19-21 & 23-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Fuchs et al. (US Pat. 5,321,227).

Fuchs et al. discloses a process for deep cutting a material covering a substrate, whereby the material absorbs the laser radiation. The laser radiation cuts/removes the material without damaging the underlying substrate. Coatings are cable coatings for single, multiple, shielded and non-shielded wires. Cable coatings are typically polymeric in nature. Cutting depths may be as great as several millimeters, while sheet thickness can be as little as several tenths of a millimeter. The energy density is in the range of 30%. Fuchs et al. discloses the use of cable coatings, typically polymeric, but does not

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specifically teach magnetic tape. Magnetic tape is a polymeric type material.

Furthermore, the type of materials chosen are a choice in design and substitutions of known equivalent structures may be made. In re Kuhle 188 USPQ (CCPA 1975), In re Ruff 118 USPQ 343 (CCPA 1958). Consequently, Fuchs et al. anticipates instant claims.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bampton as stated in the rejection of claims 17, 19, 20-24, 26-27 & 31, above.

Bampton does not state that the method is directed towards electric parts or photovoltaic elements.

It has been held that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference

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as compared to the prior art. See *In re Casey* 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Hence it would have been obvious to one of ordinary skill in the art at the time of the invention to use the prior art process for making electric parts or photovoltaic elements.

Claims 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuchs et al. as stated in the rejection of claims 17, 19-21 & 23-27, above.

Fuchs et al. does not state that the method is directed towards electric parts or photovoltaic elements.

It has been held that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey* 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Hence it would have been obvious to one of ordinary skill in the art at the time of the invention to use the prior art process for making electric parts or photovoltaic elements.

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***Allowable Subject Matter***

Claims 18 & 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See US PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Alexandra Elve whose telephone number is 703-308-0092. The examiner can normally be reached on 6:30-3:00 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 703-308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3599 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

July 13, 2003.

  
**M. ALEXANDRA ELVE  
PRIMARY EXAMINER**